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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Han-Young Hong

P56422

8634

7590  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005-1202

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EXAMINER

VO, TUNG T

ART UNIT

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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/916,245	<b>Applicant(s)</b> HONG, HAN-YOUNG	
	<b>Examiner</b> Tung Vo	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02/19/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 4, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (US 5,440,648).

Re claim 1, Roberts discloses a closed circuit television (CCTV) system (fig. 1) comprising:

a total number of available cameras (30 of fig. 1, where total number is 12 cameras, fig. 10, to camera 1... to camera 12) for generating picture signals;

a multiplexer (38 of fig. 1) allotting identification information (col. 12, lines 49-54) to each of the picture signals received from the cameras (30 of fig. 1),

said identification information (col. 12, lines 49-54; twenty-four total bits) being represented by

a predetermined number of proper camera identification bits (four more coordinate bits, col. 12, lines 49-54, identifying the camera) and

a total number of camera identification auxiliary bits (eight bits of pixel intensity, col. 12, lines 43-45) equal in number (eight bits) to eight bits of pixels coordinate (col. 12, lines 43-45), said predetermined number of proper camera identification bits being defined in number (eight

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bits are in number), so that a number of available identifications (col. 12, lines 49-54; twenty-four total bits are considered the number of available identifications) is twice or more than the total number of available cameras (camera 1... camera 12 of fig. 10), said proper identification bits (col. 12, lines 49-54; noted twenty-for total bits identification comprises four bits that identify each camera) identify identifying which camera generated a corresponding picture signal (eight bits pixels); and

a picture signal storage medium (col. 4, lines 47-60, the processed data can be stored on magnetic or other mass storage media) for storing the picture signals and allotted identification information output from the multiplexer (38 of fig. 1).

It is noted that Roberts teaches the equal in number of bits is the eight bits pixel coordinate and the eight bits of pixel intensity (col. 12, lines 43-45) and addition of bits used to multiplex channels in each camera (col. 3, lines 7-8) for identifying the camera (col. 12, lines 43-54). This disclosure would fairly suggest one of ordinary skill in the art to use the multiplexer and interface unit (38 of fig. 1) to add eight more bits for identifying the camera, which is equal to the total number of camera identification auxiliary bits (eight bits of pixel intensity, col. 12, lines 43-45) to increase the record bits to twenty-eight total bits. Doing so allow the system to multiplex additional bits for identifying the camera to satisfy the condition of a number of available identifications (twenty-eight total bits are considered the number of available identifications) is twice or more than the total number of available cameras (twelve cameras; camera 1... camera 12 of fig. 10) as suggested by Roberts.

Re claim 2, Roberts further discloses wherein said multiplexer is a parallel to serial multiplexer (38 of fig. 1).

Re claim 4, Roberts further discloses wherein the picture signal storage medium comprises a single digital storage medium (col. 4, line 60, storage media stores digital pixels).

Re claim 7, Roberts further discloses wherein the logical values of said auxiliary bits are opposite to the logical values of said proper identification bits (col. 12, lines 43-45).

Re claim 12, Roberts further discloses wherein the logical values of said auxiliary bits (eight bits of pixel intensity, col. 12, lines 43-45) are identical to the logical values of said proper identification bits (eight bits of pixel coordinate, col. 12, lines 43-45).

2. Claims 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (US 5,440,648) in view of Cotton et al. (US 4,630,110).

Re claims 3, 5, and 6, Roberts further teaches wherein the picture signal storage medium comprises magnetic (col. 4, lines 57-60), a monitor for displaying picture signals reproduced by said picture signal storage medium (50 of fig. 1), and a controller for storing said picture signals and said identification information in said picture signal storage medium (46 of fig. 1, central computer for controlling storing picture signal).

It is noted that Roberts does not particularly discloses a single video tape in a single video tape recorder; a selection unit for enabling a user to select picture signals corresponding to a particular one of said cameras for display on said monitor by inputting the identification information corresponding to said particular one of said cameras; said controller being responsive to a selection signal generated by said selection unit for selecting the picture signals corresponding to said particular one of said cameras and stored in said picture signal storage medium and outputting the selected picture signals for display on said monitor as claimed.

However, Cotton teaches a single video tape in a single video tape recorder (28 of fig. 1); a selection unit (30 of fig. 1) for enabling a user to select picture signals corresponding to a particular one of said cameras (20 of fig. 1) for display on said monitor (27 of fig. 1) by inputting the identification information corresponding to said particular one of said cameras (note the user uses the keyboard (30 of fig. 1) for selecting the identification information of particular video camera (20) for display on 27 of fig. 1) ; said controller (25 and 28) responsive to a selection signal (30 of fig. 1) generated by said selection unit for selecting the picture signals corresponding to said particular one of said cameras (20 of fig. 1) and stored in said picture signal storage medium (28 of fig. 1) and outputting the selected picture signals for display on said monitor (27 of fig. 1).

Therefore, taking the teachings of Roberts and Cotton as a whole it would have been obvious to one of ordinary skill in the art to modify the teachings of Cotton into the Roberts in order to provide an improved system for defining events which are used to control operation of a video monitor and/or a video recorder.

3. Claims 8-11, and 13-16 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Roberts et al. (US 5,440,648) in view of the applicant's admitted prior arts.

Re claims 8, 10, 13, and 15, Roberts teaches the number of cameras is 12 (Camera 1... Camera 12 of fig. 10) and the identification information comprises said proper identification bits (eight bits) and said auxiliary bits (eight bits) (col. 12, lines 43-45). It is noted that Roberts does not particularly teaches two said proper identification bits and two said auxiliary bits; three said proper identification bits and three said auxiliary bits.

However, the applicant's admitted prior art (fig. 3) shows the number of cameras is four or eight and the identification information comprises two or three said proper identification bits.

Therefore, it would have been obvious to one of ordinary skill in the art to use the teachings of the applicant's admitted prior (fig. 3) and the provided bits of Roberts (col. 12, lines 43-45) to set the multiplexer (38 of fig. 1, Roberts) to multiplexing two said proper identification bits and two said auxiliary bits for four cameras; and three said proper identification bits and three said auxiliary bits for eight cameras in order to recording the multiple images from the cameras onto a single recording with an identifying code that indicates the camera. Doing so would allow the user to easily recognize which cameras are active.

Re claims 9, 11, 14, and 15, Roberts teaches the twenty-four bits (col. 12, lines 49-54) and said proper identification bits and said auxiliary bits are disposed in an alternating arrangement such that said auxiliary bits are the least significant and second most significant bits in said arrangement and said proper identification bits are the second least significant bits and the most significant bit in said arrangement (the multiplexer, 38 of fig. 1, would obviously multiplex bits alternately).

4. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,912,351 B1).

Re claim 1, Kim discloses a closed circuit television (CCTV) system comprising:  
a total number of available cameras (CAMERA 1, CAMERA 1, CAMERA 3, ..., CAMERA n of fig. 2) for generating picture signals;

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a multiplexer (130 of fig. 2) allotting identification information (N byte of fig. 6 is considered identification information, particularly N byte comprises the physical address = 10000000, the camera ID code = 0001, the address of the corresponding I-picture frame=00000000, and picture data stored in the picture data area) to each of the picture signals received from the cameras, said identification information (N byte of fig. 6) being represented by a predetermined number of proper camera identification bits (ID camera = four bits= 0001 of fig. 5) and a total number auxiliary bits (CORRESPONDING I-PICTURE ADDRESS= eight bits = 00000000 of fig. 6) equal in number (eight bits) to the physical address bits (PHYSICAL ADDRESS= eight bits= 10000000 of fig. 5), said predetermine number of proper bits in number being defined in number so that a number of available identifications is twice or more than the total cameras (CAMERA ID CODE = 0001 (number of available identifications) is twice or more than one camera, note ID CODE, 0001 as four bits is for one camera, so total (n) cameras has (n) time (four bits)), said proper identification bits identify which camera (CAMERA ID CODE has 0001 bits) generated a corresponding picture signal (I-PICTURE DATA of fig. 6), and a picture signal storage medium (1 of fig. 2) for storing the picture signals and allotted identification information output from the multiplexer.

It is noted that Kim suggests that (CORRESPONDING I-PICTURE ADDRESS= eight bits = 00000000 of fig. 6) equal in number (eight bits) to the physical address bits (PHYSICAL ADDRESS= eight bits= 10000000 of fig. 5) and the four bits (ID camera = 0001) identifying camera. This disclosure would suggest one skill of ordinary skill in the art to design the ID camera from four bits to eight bits that equal to the predetermined number of proper camera identification bits.



Re claim 4, Kim further discloses wherein the picture signal storage medium comprises a single digital storage medium (1 of fig. 2)

Re claims 2 and 5-6, Kim further teaches the CCTV system a selection unit (USER INPUT, 150 of fig. 2; see example 60 of fig. 1) for enabling a user to select picture signals corresponding to a particular one of said cameras (CAMERA 1... CAMERAn of fig. 2) for display on said monitor by inputting the identification information corresponding to said particular one of said cameras (col. 6, lines 17-22); a controller (150 of fig. 2) for storing said picture signals and said identification information in said picture signal storage medium, said controller being responsive to a selection (80, 130, 140 of fig. 2) signal generated by said selection unit for selecting the picture signals corresponding to said particular one of said cameras and stored in said picture signal storage medium and outputting the selected picture signals for display on a monitor (col. 6, lines 17-22, see also col. 1).

Kim's disclosure of displaying picture signals reproduced by said picture signal storage medium (col. 6, lines 17-22) and a serial digital signal (fig. 6, Note serial of bits is outputted from the multiplexer (130 of fig. 2)), it would have fairly suggested, to one of ordinary skill in the art, to display the picture signal on the monitor and the multiplexer outputs serial digital signal.

5. Claims 1-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsugane et al (US 4,961,211) in view of Cooper et al. (US 5,870,139).

Re claims 1, 3, and 6, Tsugane teaches a closed circuit television (CCTV) system (fig. 1) comprising a total number of available cameras (5-8 of fig. 1) for generating picture signals;

a multiplexer (104 of fig. 1) allotting identification information to each of the picture signals received from the cameras (Note the multiplexer (104) multiplexes a K-bit and J-bit; col. 5, lines 44-62);

said identification information being represented by a predetermined number of proper camera identification bits (DI (K(8)) bits, the monitor ID signal IDM and 6 bits, see A, B, 41 of fig. 3; A = 8 bits and B=6 bits, multiplexing A and B = 14 bits) and a total number of camera identification auxiliary bits (J-bits = 14, J(14) of fig. 3, voice is incorporated to identify the camera) so that a number of available identifications ( the multiplexed K-bit and J-bit; col. 7, lines 48-56) is twice or more than the number of the cameras (5-8 of fig. 1), said proper camera identification bits identify which camera (IDC(B1B0) of fig. 1, Table in col. 7)) generated a corresponding picture signal (101 of fig. 1). Tsugane teaches the multiplexed signal that is transmitted to a receiver (220 of fig. 1) for displaying on the selected TV monitor (32-35 of fig. 1) and the corresponding voice to the speaker (31 of fig. 1) and a single digital storage medium (71 of fig. 6; Note a frame memory (71) stores the picture signal DI).

It is noted that Tsugane does not particularly teach a picture signal storage medium comprises a single video tape in a single video tape recorder for storing the picture signals and allotted identification information output from the multiplexer; and a controller for storing said picture signals and said identification information in said picture signal storage medium, and stored in said picture signal storage medium and outputting the selected picture signals for display on said monitor as claimed.

However, Cooper teaches a picture signal storage medium comprises a single video tape in a single video tape recorder (600 of fig. 1) for storing the picture signals (multiplexed video

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and audio signals, fig. 1) and allotted identification information output from the multiplexer (fig. 7; Note a video recorder information area (750 of fig. 7) is reserved for the display of information recorded by the video recorder (600 of fig. 1) such as, a timer, date, counter, etc. The camera indicator symbology (760 of fig. 7), placed on the video picture by the video camera code and symbology encoder (270 of fig. 2), displays the number of the video camera (301-304 of fig. 1), which generated the frame or field being viewed. The status indicator symbology (710a-f of fig. 7), status indicator divider (720 of fig. 7), bar graph (730 of fig. 7), dividers for bar graph (740 of fig. 7), and camera indicator symbology (760 of fig. 7) are displayed on a black border created by the video controller (200 of fig. 2) of the video multiplexing system (100 of fig. 1)); a controller (200 of fig. 2) for storing said picture signals and said identification information in said picture signal storage medium, and stored in said picture signal storage medium and outputting the selected picture signals for display on said monitor.

Therefore, taking the combined teachings of Tsugane and Cooper et al as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Cooper into the CCTV of Tsugane for recording the identified code of the camera so that a user would be easily to recognize image from the identified camera. Doing so would allow the user to view the image and know which of the camera is active.

Re claim 2, Tsugane further teaches wherein said multiplexer is a parallel to serial multiplexer (col. 7, lines 48-56).

Re claim 5, Tsugane further teaches a monitor (32-35 of fig. 1) for displaying picture signals reproduced, a selection unit (SW5, manual selection) for enabling a user to select picture signals corresponding to a particular one of said cameras for display on said monitor by inputting

the identification information corresponding to said particular one of said cameras (SW1-SW5 of fig. 2; and 9 of fig. 1).

Re claim 6, Tsugane further teaches a controller (9 of fig. 1) being responsive to a selection signal generated by said selection unit for selecting the picture signals corresponding to said particular one of said cameras.

Re claim 7, Tsugane further teaches wherein the logical values of said auxiliary bits (DV (J= 14 bits) are opposite to the logical values of said proper identification bits (IDM = 2 bits).

Re claim 8, Tsugane further teaches wherein the number of cameras is four (5-8 of fig. 1) and the identification information comprises two said proper identification bits (IDM = 2 bits) and two said auxiliary bits (DV (J=14 bits) includes two said auxiliary bits).

Re claim 12, Tsugane further teaches wherein the logical values of said auxiliary bits are identical to the logical values of said proper identification bits (IDM = 2 bits, DV (J=14 bits) are obvious identical to the logic values (bits)).

Re claim 13, Tsugane further teaches wherein the number of cameras is four (5-8 of fig. 1) and the identification information comprises two said proper identification bits (IDM, B1B0) and two said auxiliary bits (J=14 bits would obviously includes two said auxiliary bits).

6. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsugane et al (US 4,961,211) in view of Cooper et al. (US 5,870,139) in view of the applicant's admitted prior art.

Re claims 10 and 15, the combination of Tsugane and Cooper teaches the auxiliary bits is 14 includes the threes said auxiliary bits but they do not particularly teaches wherein the number

of cameras is eight and the identification information comprises three said proper identification bits as claimed.

However, the applicant's admitted prior art (fig. 3) shows the number of cameras is eight and the identification information comprises three said proper identification bits.

Therefore, Taking the teachings of Tsugane, Cooper, and the applicant's admitted prior art as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the applicant's admitted prior art (fig. 3) into the combined CCTV of Tsugane and Cooper for the same purpose of recording the multiple images from the cameras onto a single recording with an identifying code that indicates the camera. Doing so would allow the user to easily recognize which cameras are active.

### ***Conclusion***

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2621